

	GOVERNMENT OF NEWFOUNDLAND AND LABRADOR Department of Transportation and Infrastructure	BRIDGE INSPECTION REPORT B09222016-1	
Date: 3/2/2016	Inspected By: Chris Lyver	Category: Eng. - Engineering	
BRIDGE INFORMATION			
Site:	1-044 - NORTH RIVER BRIDGE, CLARKE'S BEACH		
Route:	70	Overall Length:	20.6 m
Year Built:	1966	Est: No	Overall Width: 9.9 m
Year Last Rehab.:		Est: No	Roadway Width: 8.6 m
Region:	AVALON PENINSULA	Sidewalk Width:	0 m
Jurisdiction:	Provincial	Clearance to R.D. or N.W.L.:	1.9 m
Type of Structure:	01 - AASH to Girder	Max Depth of N.W.L.:	1 m
Purpose of Structure:	04 - Over Non-Navigable Waters	Spans:	
Type of Handrail:	02 - Concrete Rail	Span No.:	Length
Roadway Surface:	02 - Asphalt	1	12.3
Alignment Vertical:	01 - Good	2	0
Alignment Horizontal:	01 - Good	3	0
Restrictions:	No	4	0
		5	0
		6	0
BRIDGE PHOTOS			
			
SUBSTRUCTURE			
Condition:	P - Poor	Bearings:	F2 - Fair
		Bearing Seat:	F2 - Fair
Comments:	P: NW/SW Abut corners F1: Remainder - Assumed condition of the buried/submerged reinf. conc. abut. footings - Medium erosion along abut footings that are visible through water - Very severe conc. delamin/spalling/disinteg continues to NW/SW abut. corners and exterior faces. Medium conc. spalling/disinteg with light corrosion to exposed reinf. along top of SW wingwall (under end block) - Numerous medium vert./horiz/ cracks and light delamin/spalling to 4 wingwalls - Numerous wide vertical/horizontal cracks in faces of the orig. abuts. with med. efflor. deposits - Narrow vert./horiz. cracks in faces of orig. abuts. extensions - Medium spalling to SE corner of South Abutment (extension) - Assumed condition of the bearings (inspection restricted due to height/water depth)		
SUPERSTRUCTURE			
Condition:	F1 - Fair	Expansion Joints:	F1 - Fair
Comments:	- Assumed condition of expansion joints - Girders/diaphragms remain in fair condition, (some exter. end diap's and girders covered in pigeon feces) - Medium/wide vert./horiz. cracks in 4 exterior diap's/retaining blocks - No		

visible sign of expansion joints (paved over on deck) (no signs of leakage on abutments)

DECK

Condition:	F2 - Fair	Curbs:	F1 - Fair
Hand Rail:	P1 - Poor	Roadway Condition:	F1 - Fair
Approach Rail:	P3 - Poor		
Comments:	- Light honeycombing to interior deck soffit - Medium longt./trans/ vert/horiz cracks in curb/sidewalk surfaces/fascias - Narrow transverse cracks in cantilever exterior deck soffits - Const. joints between deck/curb fascias opening up - No exit guiderail NW/SE app, guiderail aging with minor damage and tipping - Deck and approaches re-surfaced since last inspection - Numerous very wide horiz./vert. cracks and severe concrete spalling/disinterg. to SE end Block. - Medium spalling to top of NW end Block		

HYDROLOGY

Water Velocity:	Tidal m/s	Ice Problem:	K - Known Problem
Water Depth:	Tidal m	Scour Problem:	P - Possible Problem
Waterway:	01 - Adequate	Debris Problem:	N - No Problem
Comments:	Severe slope erosion along SW wingwall - Numerous very wide horiz./vert cracks, sections with severe delamin/spalling with med. corrosion to exposed rein. on conc. handrails and NE/SW end blocks		

REPLACEMENT/REHABILITATION

Next Rehab. Date:	2016	Replacement Year:	2030
Antic. Rehab. Cost:	\$200000	Replacement Cost:	\$500000
Recommendations:	- Re-hab structure - In the interim, install new app./exit guiderail c/w haz-markers (maint). Note: Ensure guiderails (approach) extends out beyond end blocks		

OBSERVATIONS

Overall Condition:	P - Poor	Requires Further Inspection:	Yes
Additional Observations:	*- Bridge Office should re-inspect NW/SW abut. corners P: NW/SW Abut corners P1: Handrails P3: Approach rail F1: Remainder Rip-rap at SW corner of structure has migrated into channel.		

LEGEND:

Condition Definitions:

- 1 - *Good - [discontinued code].
- 2 - *Fair - [discontinued code].
- 3 - *Poor - [discontinued code].
- 4 - *Unsafe - [discontinued code].
- G - Good.

- F2 - Fair.
- F1 - Fair.
- P3 - Poor.
- P1 - Poor.
- P - Poor.

- C - Unsafe (Closed to Public).
- U - Uninspectable.
- I - Inapplicable.

Problem Definitions:

- N - No Problem.
- P - Possible Problem.
- K - Known Problem.
- NA - Not Applicable.

Category Definitions:

- Maint. - Maintenance.
- Eng. - Engineering.
- Office - Bridge Office.

PHOTO GUIDELINES:

Inspection Photos:

- Please provide photos using guidelines below:
- Any item which inspector feels should be documented by photograph
 - All items noted above as being P3, P1, P, or C
 - Any evidence of known ice, scour, debris, waterway problems

INSPECTION PHOTOS